

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

5 Applicant(s): Cofino et al.
Docket No.: YOR920000151US2
Serial No.: 10/620,407
Filing Date: July 16, 2003
Group: 3625
10 Examiner: Sarah R. Gedrich

Title: System, Program Product, and Method for Comparison Shopping with
Dynamic Pricing over a Network

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TWICE CORRECTED APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

20 Sir:

Appellants hereby submit this Twice Corrected Appeal Brief to conform
to the current format requirements. The original Appeal Brief was submitted on
December 16, 2005 to appeal the final rejection dated June 20, 2005, of claims 1 through
25 22 of the above-identified patent application.

REAL PARTY IN INTEREST

The present application is assigned to International Business Machines
Corporation, as evidenced by an assignment recorded on April 21, 2000 in the United
30 States Patent and Trademark Office at Reel 010763, Frame 0821. The assignee,
International Business Machines Corporation, is the real party in interest.

RELATED APPEALS AND INTERFERENCES

A Notice of Appeal was filed on November 4, 2005 for related United
35 States Patent Application Number 09/556,725.

STATUS OF CLAIMS

Claims 1-22 are presently pending in the above-identified patent application. Claims 1, 2, 5, 10-13, 17, and 22 remain rejected under 35 U.S.C. §102(b) as being anticipated by Herz et al. (United States Patent Publication Number 2001/0014868), claims 3, 4, 6-9, 14, 15, 18, 20, and 21 remain rejected under 35 U.S.C. §103(a) as being unpatentable over Herz et al. in view of Ojha et al. (United States Patent Number 6,598,026), and claims 16 and 19 remain rejected under 35 U.S.C. §103(a) as being unpatentable over Herz et al. in view of Issa (United States Patent Publication Number 2003/0093355). Claims 1, 10, 11, and 20-22 are being appealed.

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STATUS OF AMENDMENTS

There have been no amendments filed subsequent to the final rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

The present invention is directed to a computer that executes a bid agent process (FIG. 1A: 111) that receives one or more selection requests for selected products (FIG. 5: 509) over one or more of the network interfaces (pages 7-8). A bid request process (FIG. 3: 300) sends a bid request over one or more of the network interfaces to one or more stores requesting a bid on the selected product (FIG. 5: 509) (pages 8-9 and 12-13). The bid request (FIG. 1A: 500) has a bid protocol agreed on by the stores and the stores also agree to send a bid within a time period (pages 9-10). A bid receiving process then receives the bids and resends the bids over the network interface to the user (FIG. 1A: 101) (page 13).

Independent claim 1 is directed to a computer system for comparison shopping over one or more networks (FIG. 1B: 120, 140), the system (FIG. 1: 100) comprising: one or more central processing units (CPUs), one or more memories, and one or more network interfaces in communication with one or more networks (FIG. 1B: 120, 140) (pages 7-8); a bid agent process (FIG. 1A: 111) adapted to determine whether one or more products (FIG. 5: 509) are described in information communicated to a user (FIG. 1A: 101) (page 8 and 15), where the bid agent process (FIG. 1A: 111) is further adapted to determine whether the user (FIG. 1A: 101) chooses to receive bids on the one or more

products (FIG. 5: 509) described in the information and adapted to create a bid request (FIG. 1A: 500) if the user (FIG. 1A: 101) chooses to receive bids on the one or more products (FIG. 5: 509) described in the information (pages 8-9); and a broker (FIG. 1A: 150) that sends the bid request (FIG. 1A: 500) over one or more of the network interfaces
5 to one or more stores (pages 8-9 and 12-13), the broker (FIG. 1A: 150) using one or more values of a closeness measure to determine one or more related products (FIG. 5: 509) associated with a selected product (FIG. 5: 509), where the one or more values of the closeness measure are determined using attributes (FIG. 5: 506) of the selected product (FIG. 5: 509) and the one or more related products (FIG. 5: 509), the bid request (FIG.
10 1A: 500) requesting a bid on the selected product (FIG. 5: 509) and at least one of the one or more related products (FIG. 5: 509) (page 15), and wherein the broker (FIG. 1A: 150) receives bids from the stores and resends the bids over one or more of the network interfaces to a user (FIG. 1A: 101) (page 13).

Independent claim 20 is directed to a method for comparison shopping
15 over a network (FIG. 1B: 120, 140) (pages 7-8), comprising the steps of: determining whether one or more selected products (FIG. 5: 509) are described in information communicated to a user (FIG. 1A: 101) (pages 8 and 15); determining whether the user (FIG. 1A: 101) chooses to receive bids on the one or more selected products (FIG. 5: 509) described in the information (pages 8-9); creating a bid request (FIG. 1A: 500) if the
20 user (FIG. 1A: 101) chooses to receive bids on the one or more selected products (FIG. 5: 509) described in the information (page 13); using one or more values of a closeness measure to determine one or more related products (FIG. 5: 509) associated with the one or more selected products (FIG. 5: 509), where the one or more values of the closeness measure are determined using attributes (FIG. 5: 506) of the one or more selected
25 products (FIG. 5: 509) and the one or more related products (FIG. 5: 509) (page 15); sending a bid request (FIG. 1A: 500) over one or more network interfaces to one or more stores, the bid request (FIG. 1A: 500) requesting a bid on the one or more selected products (FIG. 5: 509) and at least one of the one or more related products (FIG. 5: 509) (pages 8-9 and 12-13); and receiving bids from the stores and resending the bids over one
30 or more of the network interfaces to a user (FIG. 1A: 101) (page 13)

Independent claim 21 is directed to a computer program product performing the steps of: determining whether one or more selected products (FIG. 5: 509) are described in information communicated to a user (FIG. 1A: 101) (pages 8 and 15); determining whether the user (FIG. 1A: 101) chooses to receive bids on the one or more
5 selected products (FIG. 5: 509) described in the information (pages 8-9); creating a bid request (FIG. 1A: 500) if the user (FIG. 1A: 101) chooses to receive bids on the one or more selected products (FIG. 5: 509) described in the information (page 13); using one or more values of a closeness measure to determine one or more related products (FIG. 5: 509) associated with the one or more selected products (FIG. 5: 509), where the one or
10 more values of the closeness measure are determined using attributes (FIG. 5: 506) of the one or more selected products (FIG. 5: 509) and the one or more related products (FIG. 5: 509) (page 15); sending a bid request (FIG. 1A: 500) over one or more network interfaces to one or more stores, the bid request (FIG. 1A: 500) requesting a bid on the one or more selected products (FIG. 5: 509) and at least one of the one or more related products (FIG.
15 5: 509) (pages 8-9 and 12-13); and receiving bids from the stores and resending the bids over one or more of the network interfaces to a user (FIG. 1A: 101) (page 13).

Independent claim 22 is directed to a computer system (FIG. 1: 100) for comparison shopping over one or more networks (FIG. 1B: 120, 140), the system (FIG. 1: 100) comprising: one or more central processing units (CPUs), one or more memories,
20 and one or more network interfaces in communication with one or more networks (FIG. 1B: 120, 140) (pages 7-8); and a bid agent process (FIG. 1A: 111) that determines whether one or more products (FIG. 5: 509) are described in information communicated to a user (FIG. 1A: 101) (page 8 and 15), where the bid agent process (FIG. 1A: 111) determines whether the user (FIG. 1A: 101) chooses to receive bids on the one or more
25 products (FIG. 5: 509) described in the information (pages 8-9), where the bid agent process (FIG. 1A: 111) prepares a bid request (FIG. 1A: 500) when the user (FIG. 1A: 101) chooses to receive bids on the one or more products (FIG. 5: 509) described in the information (pages 13), and where the bid agent process (FIG. 1A: 111) communicates the bid request (FIG. 1A: 500) over the one or more network interfaces and
30 communicates to the user (FIG. 1A: 101) any bids received over the one or more network interfaces (page 13).

In one exemplary embodiment, the broker (FIG. 1A: 150) determines the one or more values of the closeness measure, and the broker (FIG. 1A: 150) determines the one or more related products (FIG. 5: 509) by determining that the one or more values of the closeness measure corresponding to the one or more related products (FIG. 5: 509) are smaller than a replacement factor (pages 17-18).

In another exemplary embodiment, the broker (FIG. 1A: 150) determines the one or more values of the closeness measure, and the broker (FIG. 1A: 150) determines each value of the closeness measure by determining weighted attributes by multiplying attributes (FIG. 5: 506) of the selected product (FIG. 5: 509) and the one or more related products (FIG. 5: 509) by predetermined weight factors, the broker (FIG. 1A: 150) further determining each value of the closeness measure by determining a sum of differences between weighted attributes for the selected product (FIG. 5: 509) and weighted attributes for one of the one or more related products (FIG. 5: 509) (pages 17-18).

STATEMENT OF GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1, 2, 5, 10-13, 17, and 22 are rejected under 35 U.S.C. §102(b) as being anticipated by Herz et al., claims 3, 4, 6-9, 14, 15, 18, 20, and 21 are rejected under 35 U.S.C. §103(a) as being unpatentable over Herz et al. in view of Ojha et al., and claims 16 and 19 are rejected under 35 U.S.C. §103(a) as being unpatentable over Herz et al. in view of Issa.

ARGUMENT

Independent Claims 1 and 20-22

Independent claims 1 and 22 were rejected 35 U.S.C. §102(b) as being anticipated by Herz et al. and independent claims 20 and 21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Herz et al. in view of Ojha et al.

Regarding claim 1, the Examiner asserts that the process disclosed by Herz is capable of being adapted to determine whether the user chooses to receive bids on the one or more products described in the information, and adapted to create a bid request if the user chooses to receive bids on the one or more products described in the

information. Regarding claims 20 and 21, the Examiner acknowledges that Herz fails to disclose determining whether the user chooses to receive bids on the one or more selected products described in the information, creating a bid request if the user chooses to receive bids on the one or more selected products described in the information, ...the bid request
 5 requesting a bid on the one or more selected products and at least one of the one or more related products, and receiving bids from the stores. The Examiner asserts, however, that Ojha discloses these limitations. In the Response to Arguments section of the final Office Action, the Examiner asserts that Applicant's arguments filed April 8, 2005, fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims
 10 define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. The Examiner further asserts that Ojha discloses a system and method that allows a buyer to create a shopping list and designate "whether a particular item will automatically solicit quotes from a plurality of sellers" and that the bid request disclosed by Ojha is "sent to the plurality of sellers to
 15 solicit quotes over the network shown in Figure 1 "

First, whether or not the system disclosed by Herz is capable of being adapted to perform the cited steps, Herz does not disclose or suggest the cited steps. Regarding the Examiner's assertion that Appellant's arguments filed April 8, 2005, fail to comply with 37 CFR 1.111(b), Appellants note that the response specifically pointed out
 20 how the language of the claims patentably distinguishes them from the references on page 11, line 21, to page 12, line 7, of the Amendment and Response to Office Action dated April 6, 2005. More specifically, Herz, for example, does not disclose or suggest determining whether the user chooses to receive bids on the one or more products described in the information, and adapted to create a bid request if the user chooses to
 25 receive bids on the one or more products described in the information, as required by independent claim 1.

Second, Appellants note that, in the text cited by the Examiner, Ojha teaches:

30 when the buyer finishes specifying the product and clicks on "Go,"
 a *search of a proprietary database* is initiated in response to which
 relevant product information is presented in the form of a list of products

as shown in interface 500 of FIG. 5. Each entry in the list includes the manufacturer, specific product information, and *a product price (e.g., the "Lowest Price" column which displays the lowest list price from among the **sellers** selling the specific product via the transaction site).*

(Col. 9, lines 37-45; emphasis added.)

Ojha teaches, therefore, that the proprietary database contains a compilation of information from a number of sellers, e.g. the "Lowest Price." In the text cited by the Examiner in the Response to Arguments, Ojha does disclose designating "whether a particular item will automatically solicit quotes from a plurality of sellers."

Appellants, however, could find **no** disclosure by Ojha that the bid request is "*sent to the plurality of sellers to **solicit quotes over the network***" shown in Figure 1," as asserted by the Examiner. Thus, Ojha does **not** disclose or suggest that a bid request is sent to one or more stores or over one or more network interfaces.

Thus, Herz et al. and Ojha et al., alone or in combination, do not disclose or suggest a bid agent process adapted to determine whether the user chooses to receive bids on the one or more products and adapted to *create a bid request* if the user chooses to receive bids on the one or more products described in the information; and a broker that *sends the bid request over one or more of the network interfaces to one or more stores, and wherein the broker receives bids from the stores* and resends the bids over one or more of the network interfaces to a user, as required by independent claim 1, do not disclose or suggest determining whether the user chooses to receive bids on the one or more selected products described in the information; *creating a bid request* if the user chooses to receive bids on the one or more selected products described in the information; *sending a bid request over one or more network interfaces to one or more stores*, the bid request requesting a bid on the one or more selected products and at least one of the one or more related products; and *receiving bids from the stores* and resending the bids over one or more of the network interfaces to a user, as required by independent claims 20 and 21, and do not disclose or suggest a bid agent process that determines whether the user chooses to receive bids on the one or more products described in the information, *where the bid agent process prepares a bid request* when the user chooses to receive bids on the one or more products described in the information, and *where the bid agent process communicates the bid request over the one or more network interfaces and*

communicates to the user any bids received over the one or more network interfaces, as required by independent claim 22.

Additional Cited References

Issa was also cited by the Examiner for its disclosure of a method, system,
5 and computer site for conducting an online auction. In the Response to Arguments
Section of the final Office Action, the Examiner notes that Issa states that “each seller is
presented with a set of continually variable data, automatically and dynamically compiled
from the aggregate of placed orders,” and asserts that this suggests that multiple sellers
are solicited to bid on orders or requests. Appellants note that Issa is directed to an
10 Internet auction method, system and computer site where independent and/or unrelated
buyers are automatically pooled to buy products/services as a group in order to entice
competitive bidding from pre-approved sellers who take advantage of the large group
sales to bid (offer) discounts. (See, Abstract.) Regarding the Examiner’s assertion that
multiple sellers are solicited to bid on orders or requests, Appellants note that the set of
15 continually variable data taught by Issa is actually *information on the bidding process*
provided to sellers; Issa, however, does **not** teach to send a *bid request*. Thus, Issa does
not address the issue of sending a bid request to one or more stores or over one or more
network interfaces.

Thus, Issa does not disclose or suggest a bid agent process adapted to
20 determine whether the user chooses to receive bids on the one or more products and
adapted to *create a bid request* if the user chooses to receive bids on the one or more
products described in the information; and a broker that *sends the bid request over one or
more of the network interfaces to one or more stores, and wherein the broker receives
bids from the stores* and resends the bids over one or more of the network interfaces to a
25 user, as required by independent claim 1, does not disclose or suggest determining
whether the user chooses to receive bids on the one or more selected products described
in the information; *creating a bid request* if the user chooses to receive bids on the one or
more selected products described in the information; *sending a bid request over one or
more network interfaces to one or more stores*, the bid request requesting a bid on the one
30 or more selected products and at least one of the one or more related products; and
receiving bids from the stores and resending the bids over one or more of the network

interfaces to a user, as required by independent claims 20 and 21, and does not disclose or suggest a bid agent process that determines whether the user chooses to receive bids on the one or more products described in the information, *where the bid agent process prepares a bid request* when the user chooses to receive bids on the one or more products
 5 described in the information, and *where the bid agent process communicates the bid request over the one or more network interfaces and communicates to the user any bids received over the one or more network interfaces*, as required by independent claim 22.

Claim 10

Regarding claim 10, the Examiner asserts that two offers are considered to
 10 be similar if the distance between their profiles is small according to this metric (Herz: paragraph 0147).

Appellants note that, in the text cited by the Examiner, Herz teaches that

many approaches are possible and any reasonable metric
 that can be computed over the relevant set of profiles can be used, where
 15 two offers or two shoppers are considered to be similar if the distance between their profiles is small according to this metric. Thus, the following preferred embodiment of a **profile similarity measurement subsystem** has many variations.
 (Paragraph 0147; emphasis added.)

20 Claim 10 requires where the broker determines the one or more values of the closeness measure, and where the broker determines the one or more related products by determining that the one or more values of the *closeness measure corresponding to the one or more related products are smaller than a replacement factor*.

25 Thus, Herz does not disclose or suggest where the broker determines the one or more values of the closeness measure, and where the broker determines the one or more related products by determining that the one or more values of the closeness measure corresponding to the one or more related products are smaller than a replacement factor, as required by claim 10.

Claim 11

30 Regarding claim 11, the Examiner asserts that attribute weights specify the relative importance of the attributes, establishing similarities or differences (Herz: paragraph 0174).

Appellants note that, in the text cited by the Examiner, Herz teaches that

the method described above requires the filtering system to measure distances between (shopper, offer) pairs, such as the distance between (U, X) and (V, Y). Given the means described earlier for measuring the distance between two multi attribute profiles, the method must associate an attribute weight, called w_k for the k th attribute, with *each attribute used in the profile of (shopper, offer) pairs*, that is, with *each attribute used to profile either shoppers or offers*. These attribute weights specify the relative importance of the attributes in establishing similarity or difference, and therefore, in determining how topical interest is generalized from one (shopper, offer) pair to another. Additional weights, called quality attribute weights, determine which attributes of an offer contribute to the quality function q , and by how much.
(Paragraph 0174; emphasis added.)

Claim 11 requires where the broker determines the one or more values of the closeness measure, and where the broker determines each value of the closeness measure by determining weighted attributes by multiplying *attributes of the selected product and the one or more related products* by predetermined weight factors, the broker further determining each value of the closeness measure by determining a sum of differences between weighted attributes for the selected product and weighted attributes for one of the one or more related products.

Thus, Herz does not disclose or suggest where the broker determines the one or more values of the closeness measure, and where the broker determines each value of the closeness measure by determining weighted attributes by multiplying attributes of the selected product and the one or more related products by predetermined weight factors, the broker further determining each value of the closeness measure by determining a sum of differences between weighted attributes for the selected product and weighted attributes for one of the one or more related products, as required by claim 11.

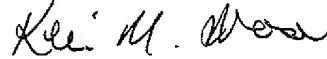
Conclusion

The rejections of the cited claims under sections 102 and 103 in view of Herz et al., Ojha et al., and Issa, alone or in any combination, are therefore believed to be improper and should be withdrawn. The remaining rejected dependent claims are believed allowable for at least the reasons identified above with respect to the

independent claims.

The attention of the Examiner and the Appeal Board to this matter is appreciated.

Respectfully,



Date: March 30, 2007

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APPENDIX

1. A computer system for comparison shopping over one or more networks, the system comprising:

5 one or more central processing units (CPUs), one or more memories, and one or more network interfaces in communication with one or more networks;

a bid agent process adapted to determine whether one or more products are described in information communicated to a user, where the bid agent process is further adapted to determine whether the user chooses to receive bids on the one or more products described in the information and adapted to create a bid request if the user
10 chooses to receive bids on the one or more products described in the information; and

a broker that sends the bid request over one or more of the network interfaces to one or more stores, the broker using one or more values of a closeness measure to determine one or more related products associated with a selected product, where the one or more values of the closeness measure are determined using attributes of
15 the selected product and the one or more related products, the bid request requesting a bid on the selected product and at least one of the one or more related products, and wherein the broker receives bids from the stores and resends the bids over one or more of the network interfaces to a user.

20 2. A system, as in claim 1, where the bid request has a bid protocol, and where the bid protocol includes a product identifier and a bid price.

3. A system, as in claim 1, where one or more of the stores re-bids if the user
25 rejects a prior bid.

4. A system, as in claim 1, where one or more of the stores combines a product with one or more second store products when submitting a corresponding bid.

30 5. A system, as in claim 1, where one or more of the bids have one or more conditions.

6. A system, as in claim 1, where the bid agent process transmits the bid request to the broker.

7. A system, as in claim 6, where the bid agent process further sends one or more bid lists to the user, the one or more bid lists containing bids from one or more of the stores about the selected product and bids from one or more of the stores about the at least one of the one or more related products.

8. A system, as in claim 6, wherein the broker compiles the bids from the stores into a bid list, and sends the bid list to the bid agent process.

9. A system, as in claim 6, where the bid agent process notifies the user that the bid request is ready for the one or more products described in a Web page, whereby the user can consent to submission by the bid agent process of the bid request to the one or more stores.

10. A system, as in claim 1, where the broker determines the one or more values of the closeness measure, and where the broker determines the one or more related products by determining that the one or more values of the closeness measure corresponding to the one or more related products are smaller than a replacement factor.

11. A system, as in claim 1, where the broker determines the one or more values of the closeness measure, and where the broker determines each value of the closeness measure by determining weighted attributes by multiplying attributes of the selected product and the one or more related products by predetermined weight factors, the broker further determining each value of the closeness measure by determining a sum of differences between weighted attributes for the selected product and weighted attributes for one of the one or more related products.

12. A system, as in claim 1, where the one or more values of the closeness measure are stored in the one or more memories and at least one of the one or more values of the closeness measure has been previously determined.

5 13. A system, as in claim 1, where the closeness measure is a distance.

14. A system, as in claim 5, where the conditions included any one or more of the following: a selected product price, a shipping method, a shipping time, a handling method, a product packaging, a set of product delivery instructions, a provision of better
10 deals for bundling two or more products, a recommendation of comparable products, related products, or both, a provision of customer service programs including express checkout in online stores, wish lists, gift registries, reward programs, discount for certain shopping groups, custom-configurable products, and email notification services.

15 15. A system, as in claim 14, where the one or more related products include any one or more of the following: a replacement product, an up-sell product, a down-sell product, a cross-sell product, a combination product to be used with the selected product, an alternative or substitute product, and a product with a related use.

20 16. A system, as in claim 1, where the user consents to receiving bids from the stores before the bids from all the stores are sent.

17. A system, as in claim 1, where a history of the bids is stored in one or more of the memories.

25

18. A system, as in claim 17, where the stored bids are used for a later bid request.

19. A system, as in claim 1, where the broker determines the stores from
30 which to solicit the bids

20. A method for comparison shopping over a network comprising the steps of:

determining whether one or more selected products are described in information communicated to a user;

5 determining whether the user chooses to receive bids on the one or more selected products described in the information;

creating a bid request if the user chooses to receive bids on the one or more selected products described in the information;

10 using one or more values of a closeness measure to determine one or more related products associated with the one or more selected products, where the one or more values of the closeness measure are determined using attributes of the one or more selected products and the one or more related products;

15 sending a bid request over one or more network interfaces to one or more stores, the bid request requesting a bid on the one or more selected products and at least one of the one or more related products; and

receiving bids from the stores and resending the bids over one or more of the network interfaces to a user.

21. A computer program product performing the steps of:

20 determining whether one or more selected products are described in information communicated to a user;

determining whether the user chooses to receive bids on the one or more selected products described in the information;

25 creating a bid request if the user chooses to receive bids on the one or more selected products described in the information;

using one or more values of a closeness measure to determine one or more related products associated with the one or more selected products, where the one or more values of the closeness measure are determined using attributes of the one or more selected products and the one or more related products;

sending the bid request over one or more network interfaces to one or more stores, the bid request requesting a bid on the one or more selected products and at least one of the one or more related products; and

receiving bids from the stores and resending the bids over the one or more
5 network interfaces to a user.

22. A computer system for comparison shopping over one or more networks, the system comprising:

one or more central processing units (CPUs), one or more memories, and
10 one or more network interfaces in communication with one or more networks; and

a bid agent process that determines whether one or more products are described in information communicated to a user, where the bid agent process determines whether the user chooses to receive bids on the one or more products described in the information, where the bid agent process prepares a bid request when the user chooses to
15 receive bids on the one or more products described in the information, and where the bid agent process communicates the bid request over the one or more network interfaces and communicates to the user any bids received over the one or more network interfaces

EVIDENCE APPENDIX

There is no evidence submitted pursuant to § 1.130, 1.131, or 1.132 or entered by the Examiner and relied upon by appellant.

RELATED PROCEEDINGS APPENDIX

There are no known decisions rendered by a court or the Board in any proceeding identified pursuant to paragraph (c)(1)(ii) of 37 CFR 41.37.